

Title (en)
METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE WITH SCHOTTKY ELECTRODES

Publication
EP 0304073 A3 19910130 (EN)

Application
EP 88113499 A 19880819

Priority
JP 20754087 A 19870821

Abstract (en)
[origin: EP0304073A2] A method for manufacturing a semiconductor device with a Schottky electrode comprises the steps of subjecting the surface of a GaAs substrate (10) to a sputtering etching process in a sputtering processing chamber (1) of a sputtering device; and depositing Schottky electrode material by sputtering on the surface of the substrate (1) to form a Schottky electrode in the processing chamber (1) without exposing the substrate (10) to the atmosphere.

IPC 1-7
H01L 21/263; **H01L 21/283**

IPC 8 full level
H01L 29/812 (2006.01); **H01L 21/263** (2006.01); **H01L 21/28** (2006.01); **H01L 21/285** (2006.01); **H01L 21/338** (2006.01); **H01L 29/47** (2006.01); **H01L 29/872** (2006.01)

CPC (source: EP KR)
H01L 21/2633 (2013.01 - EP); **H01L 21/28** (2013.01 - KR); **H01L 21/28581** (2013.01 - EP); **H01L 29/66863** (2013.01 - EP)

Citation (search report)

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- [X] JOURNAL OF VACUUM SCIENCE & TECHNOLOGY vol. 4, no. 6, November/December 1986, Second Series, pages 3091-3094, Woodbury, NY, US; A.E. GEISSBERGER et al.: "Investigation of reactively sputtered tungsten nitride as high temperature stable Schottky contacts to GaAs"
- [Y] PATENT ABSTRACTS OF JAPAN vol. 10, no. 11 (E-374), 17 January 1986; & JP-A-60 173 872 (NIPPON DENSHIN DENWA KOSHA) 07.09.1985
- [X] PATENT ABSTRACTS OF JAPAN vol. 6, no. 52 (E-100), 7 April 1982; & JP-A-56 164 527 (TOSHIBA CORP.) 17.12.1981
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- [X] IEEE ELECTRON DEVICE LETTERS vol. EDL-7, no. 4, April 1986, pages 247-249, New York, US; K.P. MACWILLIAMS et al.: "Thermal Instability of Schottky Diode Barrier Heights Modified by Inert Ion Sputter-Etching Damage"
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Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0304073 A2 19890222; **EP 0304073 A3 19910130**; JP S6450527 A 19890227; KR 890004400 A 19890421; KR 910009315 B1 19911109

DOCDB simple family (application)
EP 88113499 A 19880819; JP 20754087 A 19870821; KR 880010455 A 19880817